Projected Works.—Advertisements have been issued for tenders, by 20th instant, for the erection and conversion of certain buildings, in providing school-rooms and schoolmaster's quarters, at Dover; by 15th, for the erection of two school-rooms and master's house at Wilmington; by 20th, for the erection of St. Jude's Church, Birmingham; by 10th, for the restoration of the exterior of Hilton Church, near St. Ives; by 13th, for various works in erection of St. Luke's Church, Morton, near Bingley; by 22nd, for the construction of Whitehaven water-works, under one or more contracts, comprising about 15 miles of pipe-laying, with tanks, aqueducts, &c., &c.; by 11th, for the various works in erection of a school and master's house at Woodhouse Grove, near Leeds; by 11th, for the erection of Moor-Allerton Church and School; by a date after 14th not specified, for works in repairing and re-slating roof, and constructing new ceiling, to Horsforth Church; by 11th, for the erection of a villa at Winchester; by 17th, for 2,000 cast-iron chairs, a number of malleable iron spikes, and 10,000 native larch, Norway, or best Baltic or other sleepers; and by 18th, for the supply and fixing of iron roofs for passenger station at Tithebarn-street, Liverpool.

Bartholomew Fair, Smithfield.—As a gradually fading vestige of old London, we have, for many years past, invariably visited Bartholomew Fair, that we might watch its decline and see it expire. The light flickers in the socket. On Tuesday night last, when we paid our accustomed visit, we found that one or two stalls for gingerbread, two or three gambling-tables for nuts, and one "puppet-show," constituted the fair. A few people were scattered about, but the majority of them were policemen. The moon was shining brilliantly on the "Smooth-field," the scene of knightly jousts and religious burnings in time gone by (and of an abominable nuisance in the present day), and illumined the church built by Rahere seven hundred and forty years ago, and the hospital he founded. If it were our part to moralize and evolve "Reflections," we might fill a page with such a subject.

The Electric Light.—In Mr. Pearce's specification of patent, the main point claimed as his invention consists in so employing bar electrodes that the light shall be developed at the sides or edges in place of at points at the ends. He also claims a mode of employing bar electrodes, whereby a constant supply of non-conducting matter is kept up to retard the approach of the bar electrodes: also a mode of reobtaining contact in the event of the light going out, by the introduction of a conducting substance, to be removed by means of an electro-magnet bar or coil. There is also a claim for clockwork for regulating the time of giving light, and various other claims for alleged improvements.

Suspension Bridge over the Dneiper.—Mr. James, of Stamford-street, has recently constructed a model of the suspension bridge which is about to be constructed for the Emperor of Russia over the Dneiper, at Kieff; and which will be half a mile long. It will have six bays, four of them 444 feet long, and two 222 feet. The roadway will be 34 feet wide, and the footpath 6 feet. A swivel bridge, on the Russian side, will communicate with the rest of the structure by an island formed of masonry, and be constructed so that any injury to the chains fastened within it can be easily rectified. The whole work will occupy about five years in completion. The model, prepared in this country for the Emperor, and about to be dispatched to Russia, is constructed on the scale of one-eighth of an inch to the foot.

Concrete Piers.—An iron bridge is to be built at Chepstow, for the South Wales Railway. It is stated, that for the construction of the piers sheet-iron tubes, 12 feet in diameter, will be lowered into the river, and are expected to cut their way down to the rock. "Then, the water being pumped out, each tube will be filled with cement (query: concrete?), and this will remain in the form of a pillar of stone when the iron tube has wasted away."

Temporary Cholera Hospital in the City.—The site of the late Fleet Prison is selected, on the recommendation of the City architect, for the erection of a temporary hospital for cholera patients.

English and American Railways.—There were about eighty passengers in the train, forty of whom were in the same carriage as ourselves. "The car," in shape like a long omnibus, has a passage down the middle, sometimes called "the aisle," on the back part of which the seats are ranged transversely to the length of the apartment, which is high enough to allow a tall man to walk in it with his hat on. Each seat holds two persons, and is well cushioned, and furnished with a wooden back, ingeniously contrived, so as to turn and permit the traveller to face either way, as he may choose to converse with any acquaintance who may be sitting before or behind him. The long row of windows on each side affords a good view of the country, of which more is thus seen than on our English railroads. The trains, moreover, pass frequently through the streets of villages and towns, many of which have sprung up since the construction of the railway. The conductor passes freely through the passage in the centre, and from one car to another, examining tickets and receiving payment, so as to prevent any delay at the stations. If we desire to form an estimate of the relative accommodation, advantages, comforts, and cost of the journey in one of these railways, as compared with those of England, we must begin by supposing all our first, second, and third-class passengers thrown into one set of carriages, and we shall then be astonished at the ease and style with which the millions travel in the United States. The charge for the distance of 54 miles, from Boston to Portsmouth, was 1¼ dollar each, or 6s. 4d. English, which was just half what we had paid three weeks before for first-class places on our journey from London to Liverpool (2l. 10s. for 210 miles). Here there is the want of privacy enjoyed in an English first-class carriage, and the seats, though excellent, are less luxurious. On the other hand, the power of standing upright when tired of the sitting posture is not to be despised, especially on a long journey, and the open view right and left from a whole line of windows is no small gain. But when we come to the British second and third-class vehicles, cushionless, dark, and if it happen to rain, sometimes closed up with wooden shutters, and contrast them with the cars of Massachusetts, and still more the average appearance, dress, and manners of the inmates, the wide difference is indeed remarkable; at the same time, the price which the humblest class here can afford to pay proves how much higher must be the standard of wages than with us.—*Lyell's Second Visit to the United States.*

Prevention of Railway Accidents.—Mr. Preecy, of Lyndhurst, New Forest, proposes two plans for counteracting the effect of collisions by railway. The first he calls the hermaphroditic engine, which, when one section is built to the tender and the other to the luggage van, will, it is said, repel 300 tons, and in collision with another train similarly constructed 600 tons, besides the resistance of one ton for every buffer in the train. Sections placed as pilots before the engines will run into each other, causing a further repulsion estimated at 500 tons. One section placed as a rear-guard will resist to the same extent, if run into. The second plan is by placing four elliptic springs betwixt every pair of gravitation buffers horizontally, whereby a repellant power of 32 tons will be provided, it is said, to each carriage. But it seems to be essential to this plan that "every description of carriage that is to run on the same rail must be built with the greatest precision as to length on and width across the rail, with corrected carriage springs, all standing the same height, with the same weight, the fittings as to gravitation buffers, as to width across the rail, and height from the bearings of the wheels, the height of the sway buffers from the gravitation buffer, and the width of the sway buffers from each other. Every carriage must be built so exactly by the same gauge, that, turn the carriages either way, when empty, *convex buffers may point centrally into the concave buffers.*" Now, the danger inevitably resultant from any cause, whether temporary or in permanent construction, capable of altering the preconcerted height of one buffer thus locking into another, is so obvious that the usefulness of any plan requiring such nice "precision" of detail must be doubtful.

Orsi and Armani's Patent Metallic Lava.—We are glad to observe that this material for paving is getting steadily into use. We have seen more of it since we first spoke of it, and find no reason to alter our opinion then expressed, especially that for keeping down damp it was well adapted. The vestibule of the great hall of the Euston-square station is paved with it. It admits of the exercise of taste on the part of designers.

Zinc Paint.—We are glad to find that our hint to practical chemists has not been fruitless. Mr. C. A. F. Rochaz, St. Swithin's-lane, has recently lodged a specification of patent for improvements in the manufacture of oxide of zinc, and in the making of paints and cements where oxide of zinc is used. The first regards the sublimation of the zinc into oxide, the pure particles of which are collected by adhesion to ranges of bands suspended in canvas-covered chambers for the purpose. The coarser particles are thus collected separately and used, under the second section of the specification, as cement, when mixed with mortar. The patentee states that he makes a durable, rapidly drying, white pigment with 20 parts white zinc, 4 resin, 2 turpentine, and 1 drying oil.

Earthenware Tubes.—An improvement in the formation of sockets has been patented by Mr. Charles Jacob, of Nine Elms, engineer. A socket mould fits on the orifice in the die-plate, through which the pipe is moulded: when the socket mould is filled with clay, it yields and goes along with the pipe in being formed; and it is held up to its place against the die-plate, or against the end of the pipe, by means of a counterpoise weight.

Cremorne Gardens, Battersea-bridge.—We lately noticed the beauty of Rosherville, and are reminded that we might justly say a word in favour of Cremorne Gardens, on the banks of the Thames,—another resort for the jaded million. This we are quite willing to do. Divested of the crowd which usually fills them (but against whom, by the way, we have nothing to say, for they enjoy themselves with great propriety, and the management seems very good), they form an enjoyable retreat and deserve a visit.

Northflert Church Competition.—The first premium of 15*l.* for the restoration of this church was awarded to Messrs. Brandon and Ritchie, and the second, of 10*l.*, to Messrs. R. Potter and G. Low.

The Timber Preserving Company.—The half-yearly meeting of this company was held on the 31st ult., at their offices, Whitehall-wharf, Westminster, when a dividend at the rate of 6 per cent. per annum was declared, the chairman, Mr. George Burge, stating that their future prospects were most encouraging.

New Schools, St. Pancras.—The vestry of St. Pancras is about to erect a school-house for 250 boys, on the workhouse premises. The plans prepared by Mr. J. Lockyer have been approved, and will be ready early next week for the inspection of contractors. Particulars will doubtless be advertized.

Blind Builders *v.* Imperfect Specifications.—Sir: Separate tenders were required to be sent in for works to be done under the parish surveyor, at St. Luke's church, Old-street. The following is a list:—

	General Work.	Clean Cornice of Church.	Drain.
	£. s. d.	£. s. d.	£. s. d.
London	83 0 0	22 0 0	6 10 0
Wilson	89 15 0	70 0 0	6 0 0
Mason	93 15 0	73 10 0	28 10 0
James Ward	98 0 0	24 0 0	6 10 0
William Lamprell	94 10 0	26 0 0	22 0 0
Grist	99 0 0	69 10 0	5 10 0
Loffitt	99 15 0	70 0 0	6 0 0

The tender of Mr. London was accepted as regards the general work, but he was required by the committee to meet them at the church to tell them what he intends to do for the other amounts, as they are sure something is wrong. Whether this error is with the blind builders, or is with the professional gentleman who made the specification, your readers will judge from the practice they have in reading different specifications. To my knowledge, it frequently lies with the profession, and I believe this to be the case here.—Justice.

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